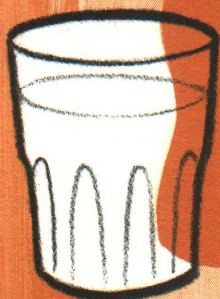


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# Changing Food Habits

By ANITA DEAN, *Extension Specialist in Foods and Nutrition*  
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COOPERATIVE EXTENSION SERVICE  
MICHIGAN STATE UNIVERSITY





## FOODS OF EARLY MAN

DATE	TOOLS	FOODS
2,000,000 B.C.	Stone Axes Clubs Sticks	Berries, Fruits Small Game
700,000 B.C. Ice Age		
400,000 B.C.	Fire Axes Spears	Large Game
75,000 B.C.	Knives Pit Traps	
12,000 B.C.	Bows Arrows	
9000-8000 B.C. Domestication of Animals and Plants	Hooks Nets	Fish Mutton
7000 B.C.	Crude Farm Implements	Porridge, Wheat Bread
5000 B.C.		Corn Beef
3500 B.C.		Rice Pork Chicken

WHAT WILL YOUR GRANDCHILDREN BE EATING in the year 2001 . . . Beef steak spun from vegetable protein? Imitation milk? Mangoes and papaya from the tropics?

There will be these and many more. Meat-like products are already on the market. Their flavor, color, texture, shape and nutritional value can be precisely controlled to resemble beef for meat-loving Americans, or seafood for those with an Oriental palate. Food chemists can match the flavor, color, and aroma of oranges plucked fresh from the tree.

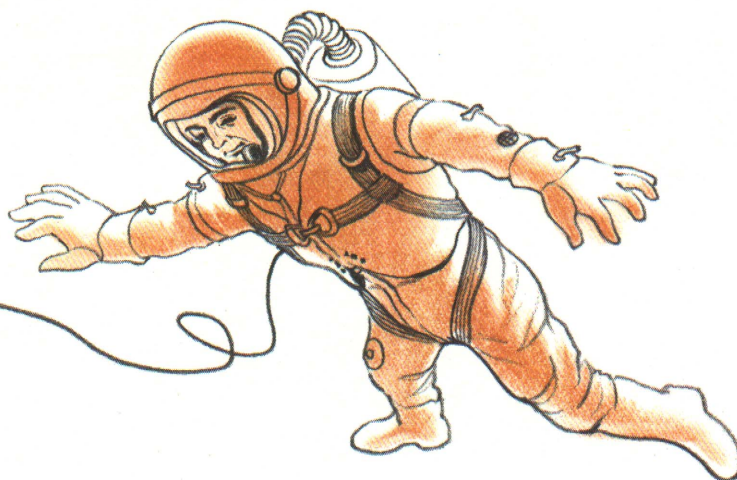
The protein, fat, vitamin and mineral content of these new foods can be regulated to meet the special needs of weightwatchers, teenagers, preschool children, expectant mothers, individuals on special therapeutic diets, or space travelers. The products may eventually become less expensive than meat. Your descendants will probably eat these kinds of foods.

In any case, the quest for food will remain a basic preoccupation of man.

Prehistoric man lived in direct contact with nature and the search for food was a daily task. The animal kingdom provided a range of foods beyond description. Even though the proportion of meat (protein) in the diet of ancient hunters was high, vegetable foods must always have been eaten to maintain health. At the close of the Hunting Age, the consumption of grasses and other seeds, (wild or semi-cultivated plants), probably increased.

Agriculture began only within the last 12,000 years — a period which comprises less than one per cent of man's time on earth. Man took his most crucial single step about 9000 B.C. when he learned to domesticate animals and raise crops. This rapidly increased his food supply. The list of crops available by the time agriculture had become established included almost all of the plants and animals we use today for food.

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# The Adventure of Change

Change is an unavoidable fact of life which we have come to expect. Scientific discoveries continue to accelerate the pace of change.

Family needs, patterns of living, and ideas of what is important are changing constantly.

Let's look at some of the important social, economic, and technological changes in modern society which are shaping and reshaping the way people live—including what and how they eat. Some of these factors are:

- Longer life expectancy
- Increasing numbers of young and old people
- Rising wages and standards of living
- Increasing occupational and social mobility
- More travel
- Wider interest in national and world affairs
- Rising levels of education
- Increasing urbanization
- More women working outside the home
- More leisure time
- Early retirement
- Greater security and independence of retirees
- New social legislation
- New medical discoveries
- New knowledge of human nutrition
- Automation and mechanization
- Advances in advertising and promotion
- Rapid advances in food technology
- New kinds and varieties of food products  
(more ready-to-serve convenience foods)
- New kinds of food packaging
- Advances in food preservation and storage

Look more closely at the last four items—those concerned with food technology.

Can you count all the changes going on in your grocery store? What do you see that you didn't see five years ago? Consider the space devoted to snacks—crackers, cookies, beverages, candy, etc. How many items are on the shelves that weren't there ten years ago?

This is change.

How do these new products affect your food habits? Do you buy snacks to fit into your daily food plan, or do you try every new snack food?

Most snack foods are not new *kinds* of food; they are new *forms* of well known foods. Crackers are still crackers, even though their form, color, taste, and shape have changed in the past 25 years.

Today already, food scientists are creating new kinds of food products like meat cuts from vegetable substances. While it may be hard to imagine their universal acceptance, circumstances in 2001 may require their general use. This would be another basic kind of change.

Meanwhile, are we going to move toward more and more highly fortified foods, with one serving supplying all the nutrient and energy requirements needed for the day?

How will we respond to ever-increasing varieties and abundance of food?

Will we be able to regulate our appetites in the face of increasing variety?

What effect will new kinds and forms of foods have on our everyday eating habits?

To answer that question, we need to understand what is meant by the term, "food habits."

Human beings are called creatures of habit. What this means in terms of people's attitudes toward what they eat is discussed in the following pages.



# Eating Patterns and

Eating, one of life's first experiences, is basically instinctive. The newborn infant adjusts almost instantaneously to breast or bottle feeding. Feeding is soon associated with security and comfort — sometimes with pain. These “meanings” may remain important throughout life, though expressed in varying ways. The developing child will accept new foods when he is physically ready if he is responding favorably to the environment in which the new food is served.

Many habits formed in infancy and childhood remain for a lifetime. Some become more firmly established with each passing year and are less easy to change.

Many things influence the food habits of adults. Some of these are:

1. Kinds and varieties of food products, their quantity and proportion in the diet.
2. Methods of processing, storing, and shipping.
3. Methods of preparing and serving.
4. Number of meals, and amount of food eaten daily.
5. The decision-makers regarding food purchase and use.
6. The nonnutritional “meanings” associated with food.

All of these become woven into distinctive patterns of eating, like what and when we eat. These patterns often settle into fixed habits. Certain foods are eaten and others refused for many different reasons which may have little to do with the food itself. We can be totally unaware of the basis for a food preference.

The following list offers some common food habits or patterns and some of the “meaning” they have. This helps explain certain food preferences. How do your own habits fit this list? Remember, these “meanings” can vary greatly among individuals or change according to time and circumstance.

## EATING PATTERNS

Eating favorite foods,  
gourmet eating, snacking  
Compulsive overeating,  
undereating, bolting food  
Private family eating  
Preference  
for childhood foods  
“Adult” foods when young  
(coffee, cocktails)  
“Meat and potatoes”  
Planning and preparing  
Carving and serving  
Style of entertaining

Fancy salads and desserts  
Food fads, fad diets

Methods of preparing  
and serving

Sharing food, impulsive invitations

Eating alone

Rare, expensive, exotic foods  
Novel foods, snacking

Buying highly advertised brands  
Fussiness, refusal to eat

Food as bribe or reward  
Formality and style (“dinner at  
eight,” “chicken on Sunday,”  
“ham at Easter,” etc.)  
Food as a gift

## “MEANING”

Pure enjoyment  
Emotional tension  
and/or release  
Security  
Immaturity,  
insecurity  
Immaturity,  
insecurity  
Masculinity  
Femininity  
Masculinity  
Status, sociabil-  
ity, tradition,  
sophistication  
Femininity  
Anxiety, atten-  
tion, gullibil-  
ity, lack of  
knowledge  
Tradition, secu-  
rity, creativity,  
status  
Sociability, affec-  
tion, tension,  
anxiety, trust  
Independence,  
loneliness  
Status, creativity  
Independence,  
attention  
Status  
Attention,  
vindictiveness  
Discipline  
Tradition, ritual  
Tradition, love,  
loyalty, morale

# Food Habits

Have you ever wondered why you like a dish like "liver and bacon" and your husband can't stand it? How can one dish cause two such opposite reactions? Have you ever tried to help overcome this dislike?

How do your family's preferences affect your food selection at the market? What effect do these varied preferences have on your family's health?

Studies show that most food dislikes are not serious health threats. Our varied food supply makes it easy to avoid most disliked foods and substitute others whether at home or outside the home. However, if likes and dislikes for certain foods are strong enough to influence meal selection, eating patterns may be seriously distorted nutritionally and the diet may become inadequate. The appendix presents a detailed picture of changes in American food preferences.

Many factors influence food preferences. Dr. James A. Bayton, Howard University psychologist, classifies different influences on the consumer into seven basic categories. The list represents the factors which affect the consumer's food preferences. Before the final decision, the food buyer must sort and weigh, consider and abandon and finally select from the most important of these in a vast cauldron of influences.

The list makes it clear that many things concern today's consumer. It doesn't tell us how different people rank these concerns in their own individual cases. An individual reaction to one concern is not an indicator of that same person's reaction to another. Likewise, the concerns are not of equal importance to all people. One individual might list the most important food qualities (in order of importance) as: (1) vitality and energy (2) general health, (3) taste-aroma-appearance satisfactions. Others might rank them as: (1) taste-aroma-appearance satisfactions, (2) price considerations, (3) general nutrition, or (1) nutritional concerns, and (2) health apprehension.

Other influences shaping food preferences are national or regional background, education, religion, family tradition, occupation, and social position.

## FOOD PREFERENCE INFLUENCES

### I. Nutrition

1. Body growth needs
2. General health needs (rather than specific health needs)
3. Vitality, energy
4. Energy "carry-through" (concern over "long-lasting" energy)

### II. Sensory-aesthetic feelings

5. Taste-aroma-appearance complex
6. Refreshment (especially "coolness" and relief of thirst)

### III. Personableness

7. In general (lively, good complexion, bright sparkling eyes, general attractiveness)
8. Sex-role  
Males — vigorous, athletic, masculine  
Females — lovely complexion, nice figure, feminine

### IV. Appropriateness (suitability to my kind of person or to given situations)

9. Age group (milk for children, coffee for older ages)
10. Status group (class-relatedness of some foods)
11. Social setting (family privacy, intimate friends, special guests, restaurants)

### V. Price, value

12. Price, per se
13. Value (what you get for your money)

### VI. Convenience

14. Purchasing
15. Storage
16. Preparation
17. Serving
18. Consumption

### VII. Health Apprehension

19. Weight control
20. Cardiac (heart)
21. Allergy
22. Contamination (pesticides, bacterial, animal medications, atomic fall-out)



## Motivation for

Few people will change their food habits simply because they are told that certain foods are good for them or will make them healthy. Health appears to be one of the least effective ways of motivating people to change their food habits.

Attempts to change attitudes about a given food must be directed to goals which are important to the individual or group. When these goals are known, an individual can be convinced that what he eats may affect his achievement of these goals.

For example, teenagers scorn suggestions that they must eat certain foods to be healthy. Boys are more impressed with a diet which improves their physical strength and athletic prowess. Girls desire a slim, attractive figure, clear skin, and beautiful hair.

Better health usually has more meaning to a person ill in a hospital, anxious to return to his home, work or school, hale and hearty again. Still, motivation to change lifetime habits is not easy, when illness strikes an older person.

People with a respect for scientific research may find it easier to change their food habits. But, some may value other things more. A color TV set, a new dress, or socializing over a coke may be more important to them than a good diet.

Changing one's food habits may be easier when one learns why he accepts or rejects certain foods. Analyzing food habits objectively, identifying eating problems, recognizing the origin of prejudices, and seeing the advantages of desirable changes, may help an adult change a food habit. The strength of the desire to make the adjustments determines the outcome.

Any change in eating habits must be reasonable and practical in terms of the person's money, skills, time, energy, abilities, etc.

There are two types of motives for changing eating habits. Generally, determination to change varies with each type. Similarly, efforts to induce change in others must be geared to the strength of motive.

*Specific motives* are usually strong ones . . . the objectives are well defined. Weight reduction is an example. Motives, which vary with sex, age, and state of health of the dieter, may range from a desire for a trim appearance to a need for lower blood pressure. The motive may be strong enough so that the person can accept a sharp reversal in his present habits. Control of some illnesses, like diabetes, present direct and compelling motivation that is based on fear of serious disability, even death. This usually makes it possible to accept even the most radical diet change.

*General motives* are weaker. Switching at the age of 20 to a new pattern of eating that will insure reaching the age of 80 in good health is a worthy aim. But, few think in such long-range terms. They are interested in nutrition only if it means something good today. Success in nutrition education, therefore, hinges on identifying personal aims and using them effectively.

An unsolved puzzle is the lack of concern adults have for the over-all health benefits of good nutrition. One widespread eating problem is obvious — obesity. An estimated 15 million Americans are 20 per cent over ideal weight. Studies indicate that a variety of factors, social and emotional, contribute to obesity. The individual habitually, probably unconsciously, turns to food as substitute satisfaction for other needs unrelated to hunger or nutrition.

The fact that relatively few overcome and control obesity over a lifetime indicates the strength of the overeating habit and the depth of the needs. Many believe in the importance of good nutrition and physical fitness; but, emotions, prejudices, taboos, prestige symbols, and other influences often outweigh knowledge, judgment, and even experience in determining eating practices.

An individual must accept the fact that the "laws of nutrition" apply to all — to himself as well as



## Changing Food Habits

other persons. Strongly entrenched food habits often belie this point of view.

Exclusive concern over nutrition and health apprehension is the profile of the food faddist, according to Dr. Bayton. Regard for a particular food can change with age. A child might be dominated by the idea of body growth when he drinks milk. An older person might drink milk primarily for vitality-refreshment.

When you select a particular food, what factors seem most important to you? After weighing the different considerations, which finally influences your choice the most? Does your point of view depend upon the particular food you are selecting? Do you consider your decisions rational? How rational would they seem to a nutritional specialist or physician? Your answers to these questions determine the kind of consumer you are. Price, according to Dr. Bayton, does not play a central role in consumer decisions.

So, how do you go about making food decisions which meet your own needs?

It's not simple and it's impossible to suggest decisions which are always correct for everyone. Rank the 22 concerns from your own immediate point of view, considering how your physician or a nutrition specialist would interpret it from a professional point of view.

For a specific example, let's suppose you find you are all fagged out by ten each morning—whether you are a homemaker trying to get the family out of the house on time each morning—or working away from home. Someone has gotten you to thinking seriously about the way you have been eating. You've been getting up at 7 a.m.—rushing through bathing and dressing, hurrying to get out of the house in order to reach work on time.

Eventually, you realize that breakfast is consisting of coffee and toast. This doesn't start the day with sufficient energy and nutrients to keep you going

efficiently. As a result, you find yourself snacking on a sweet roll or doughnut at the coffee break. Finally, you are convinced that something needs to be done. So, how do you go about it?

Dr. Bayton suggests that the situation includes two habits—the old habit of “rush-rush,” which you have to “unlearn,” and the new habit of eating an adequate breakfast. However, both of these specific habits include two sets of general habit patterns that will take up the whole morning routine of getting ready for work. Eating a more adequate breakfast may require a complete reorganization of your day—getting up earlier or rearranging or rescheduling other activities.

This is only one example of what is involved in abandoning one food habit and adopting a new one. Recalling the 22 concerns which bear upon food choices, it is clear that unlearning and learning is not an easy task. It involves weighing rewards and satisfactions, psychological and economic barriers of one habit against a new one. These are a part of each of those 22 concerns.

An effort to bring about a new habit must begin with an awareness of the present pattern which needs to be changed. Similarly, national food trends—changes over a long period of time—involve unlearning of habits on a mass scale. Learning and unlearning is a never ending process.

Nutrition education is no longer a simple matter. It takes more than knowledge of your own nutritional needs to be “nutritionally educated.” You must keep yourself informed on new developments in food technology, scientific breakthroughs in nutrition, even international problems, and food legislation. All of these will affect the choices you make—the changes you may need to make—in your daily food habits.

Changes in types and forms of foods will continue at a pace which staggers the imagination. The alternatives available will become even greater. Everyone will seem to have a recommendation.

## WHO SPEAKS FOR YOUR HEALTH

How can you judge the reliability of diet and health recommendations to which you are exposed? How do you interpret the barrage of food advertising that bombards you? Who speaks for your health?

Occasionally, you may read conflicting recommendations which leave you confused. While disagreements arise among professional agencies and researchers, one must realize that all information concerning human nutrition is in a sense incomplete; and therefore, subject to different interpretation. Differences in recommendations should be resolved as scientific knowledge expands, but, this may take years. Meanwhile, the most reliable sources of information are nutritional scientists who conduct studies that are carried out by recognized scientific procedures. Following are the only agencies qualified and charged with the responsibility of making nutritional recommendations for the public.

- The Food and Nutrition Board of the National Academy of Sciences — National Research Council, made up of 24 scientists from universities, research organizations, and industry, interprets scientific opinion on problems of food and nutrition for the government. The board publishes the dietary allowances which recommends the amount of each nutrient for an individual depending on age and activity. These scientific goals can be used to plan diets and evaluate food supplies. Daily food guides prepared by nutritionists of the United States Department of Agriculture translate the scientific facts about nutrition into everyday eating habits. Leaflets prepared by nutritionists and home economists with the Federal and State Extension Services are based upon this information.
- The United States Public Health Service
- The Food and Drug Administration
- Michigan Department of Agriculture
- Other Divisions of the Department of Agriculture such as the Office of Experiment Stations
- Food and Agricultural Organizations of the United Nations (FAO)
- The Nutrition Foundation supported by food manufacturers
- Professional Organizations:
  - American Home Economics Association
  - American Dietetic Association
  - American Institute of Nutrition
  - Council of Foods and Nutrition of American Medical Association

## *Influence of*

We become so accustomed to our own family food habits that even the people next door seem to have strange ideas of what is good to eat and good for them. We should not be surprised that people from distant countries have different food patterns and preferences from ours. Many different combinations will supply the nutrients essential for good health.

Table I shows how the people of two different parts of the world — The Far East and Scandinavian countries — obtain their nutritional requirements. Foods of other blocks of countries in the Middle East, Latin America, Western Europe, and Africa can be classified in the same manner to show how nutritive needs may be met.

On the basis of food habits, the countries of the world might conveniently be grouped as follows:

The Far East  
The Middle East  
Western Europe  
Africa  
Central and South Pacific  
(Australia and New Zealand)  
Canada  
United States  
Latin America

We need to respect the traditional food patterns of all the world's peoples. Their national dishes can add infinite interest and variety to our daily fare.

A study of national food patterns should include information about the following influences: nutritional status of the population, level of nutritional education and research, cultural patterns (religion, traditional customs and attitudes), food production — capacity and output, rate of food output to population, soil productivity, technological development, geography, weather, people's buying power.

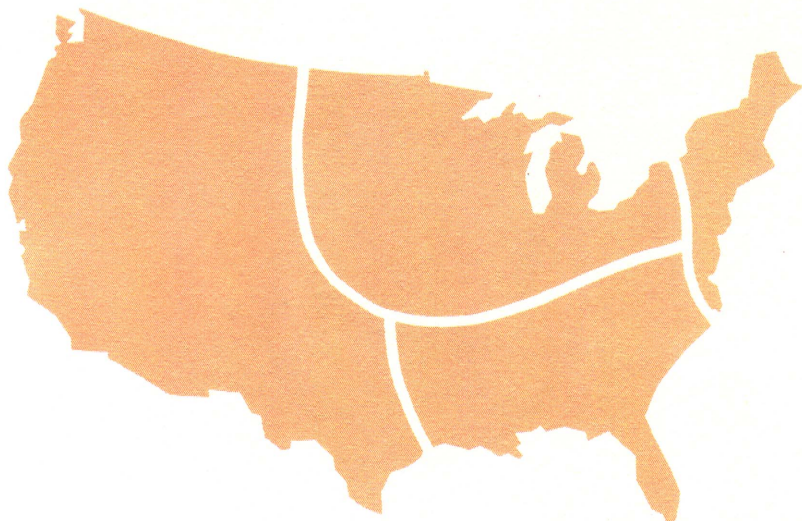


# National Foods



## COMPARISON OF SCANDINAVIAN AND ORIENTAL FOODS

	GRAINS	PROTEIN	VITAMIN A	VITAMIN C	CALCIUM
<b>JAPAN</b>	Rice Noodles Some barley Oats Rye	Fish, Beef Soybean products Soybean curd Eggs when available	Fish Pickled vegetables	Citrus fruits (tangerines) Nasi (similar to pear & apple) Bean sprouts	Fish bones Seaweed Soy beans Milk when available
<b>CHINA</b>	Rice Noodles Some wheat Corn Millet seed	Pork, Fish Lamb, Goats Shellfish Fowl (duck) Soybeans Eggs Legumes	Sweet potato Carrots Green leafy vegetables	Cabbage	Green leafy vegetables
<b>SWEDEN</b>	Wheat Potatoes Rice Oats, Rye	Fish Meat (veal, reindeer) Dried yellow peas	Whole milk Cream Butter Fish Liver Custards Egg yolk Cheese	Strawberries Wild berries Potatoes with skins Turnips Greens in season Cabbage Rose hips	Milk Clabbered milk Cheese Cream sauces Cream soups Small fish
<b>DENMARK</b>	Barley Oats Rye Wheat	Codfish Meat (lamb) Fish pudding Poultry Cheese Eggs Yellow peas	Whole milk Butter Cheese Cream Egg yolk Carrots Liver Fish	Potato Cabbage Berries	Milk Clabbered milk with sugar and cinnamon Cheese Small fish



# *Regional and*

## REGIONAL FOOD PATTERNS IN THE UNITED STATES

ETHNIC INFLUENCE	CHARACTERISTIC TRADITIONAL FOODS	AGRICULTURAL FOOD PRODUCTS
French, Dutch, German, English, Swiss, Italian, Balkan, Scandinavian, Irish.	<p style="text-align: center;"><b>NORTH CENTRAL</b></p> Cherry pie, Cornish pasties (meat pies), blueberry pie and other dishes, peaches, apples, characteristic dishes of the area's ethnic groups.	Corn, wheat, dairy products, cherries, peaches, apples, blueberries, grapes, meat, fish, beans.
Scotch, Irish, English (Piedmont area), French (New Orleans area), Spanish (Florida area), Negroes.	<p style="text-align: center;"><b>SOUTH</b></p> Hot breads such as cornbread, biscuits, spoon bread; corn fritters, corn pone, hominy grits, black eyed peas, leafy green vegetables (turnip tops, mustard greens, collards, cabbage) cooked with salt pork; sweet potatoes and yams; southern fried chicken; fish such as red snapper, Maryland crab, shrimp; ham, Creole cookery (Spanish and French).	Rice, pecans, pork, chicken, corn, sweet potatoes and yams, citrus fruits.
English, Scotch, German (Pennsylvania Dutch), Irish, Dutch, French, Swedish, Spanish, others.	<p style="text-align: center;"><b>NEW ENGLAND AND MIDDLE ATLANTIC</b></p> Soups, clam chowder, fish and shellfish, dried codfish, corned beef, New England boiled dinner, Boston baked beans, simple steamed puddings, cobblers and pies, Pennsylvania Dutch dishes.	Fish: haddock, red fish, flounder, sole, cod, whiting, pollock, hake, oyster, clam; root vegetables, berries.
Indians, Spanish, Mexican (Southwest); Chinese, Japanese, Filipinos, Hawaiians (Mid-Pacific).	<p style="text-align: center;"><b>WEST</b></p> Tortillas, tamales, pinto beans, chili, corn, fish and shellfish (salmon, crab, lobster), tomatoes, chili peppers, green peppers, fresh vegetables, salads, avocados, artichokes, citrus fruits, ripe olives, barbecued beef and poultry, sourdough bread.	Beef, wheat, rice, citrus fruits, dates, apples, pears, plums, peaches, fish, shellfish.

# Religious Influence



The United States, being a nation of immigrant settlers, has no distinctive national food patterns. However, different regions have developed their own characteristics, as shown in the accompanying table.

Many American food patterns are deeply entrenched, with long histories of family, national, and racial tradition. An awareness and an analysis of the background of our habits is the first step toward improving or changing them.

A "homogenization" of food patterns between regions seems to have taken place in the United States as lines of separation are fast disappearing due to rapid transportation and mass distribution of food. Extensive mobility of families in this country is also helping to spread regional preferences. Change is constantly working to amend and adjust American food habits.

Even food patterns based on religious custom and discipline are escaping their original confines and gaining broader acceptance.

## **Jewish (Orthodox)**

Meat is selected, slaughtered and prepared according to Biblical ordinances. Since blood is forbidden as food, meat must be drained thoroughly. Meat and milk cannot be combined at the same meal. Traditional orthodox Jewish homes keep two completely separate sets of dishes, silver, and cooking equipment; one for meat meals and one for dairy meals. Fish with fins and scales are allowed. Shellfish and eels are forbidden. Bakery products and prepared food mixtures must be produced under acceptable kosher standards. Special dietary considerations are observed for important festival holidays: Rosh Hashanah, the New Year in September; Succoth, the fall harvest holiday; Chanukah, the feast of lights in mid-winter; and Purim, a gay holiday in spring. Yom Kippur, ten days after Rosh Hashanah, is a day of fasting. During Passover, a spring commemorative

festival lasting eight days, leavened bread or cake is forbidden. Matzo, an unleavened bread, is eaten, instead.

## **Moslem (Islam)**

Pork and alcoholic beverages are prohibited. All meat must be slaughtered according to ritual letting of blood.

## **Buddhism**

Use of all meats is forbidden.

## **Hinduism**

Beef, pork, and some fowl are forbidden.

## **Seventh-day Adventist**

While pork and shell fish are excluded, individual families abstain from other meat and fish as well. Some do not use milk, butter and eggs. The great majority do not drink coffee or tea.

## **Church of the Latter-Day Saints (Mormon)**

Coffee, tea and alcoholic beverages are prohibited.

## **Church of Christ Scientist**

Stimulants including coffee and tea are discouraged; alcoholic beverages are prohibited.

## **Roman Catholic**

Meat is now allowed on most Fridays. On Ash Wednesday and Good Friday, all Catholics between 21 and 59 years of age must fast and abstain from meat and meat products. Good reason can excuse one from fast or abstinence or both. On Ash Wednesday and Fridays of Lent, Catholics over 14 years of age observe abstinence according to specific rules of the diocese in which they live. The law of abstinence forbids meat and meat products. The law of fasting permits one full meatless meal, and two other meatless meals which together do not equal a second full meal.



# American Food

The food preferences of Americans have been widely studied. Army studies show how servicemen's food preferences reflect those of the general population. A recent survey has shown their favorites to be: milk, grilled steak, ice cream, French fried potatoes, hot biscuits and most meats except lamb and fish. Least liked are mashed turnips, broccoli, asparagus, iced coffee, cauliflower and several other vegetables. Soldiers seldom like rhubarb and stewed prunes, but peaches are everybody's favorite.

The same Army study has shown that preference for certain foods, like soups and vegetables, increases with age. Preference for others, like cereals, desserts and fruits, decreases with increasing age.

The studies indicate that the filling and satisfying qualities of food are important for predicting preferences. Individual food preferences fall into patterns or groups . . . fruit was either liked or disliked in general without preference for just one fruit or another. Some people prefer their meat in the solid state, as a roast or steak; others preferred creamed or casserole dishes.

Many studies reveal the strong effect of national origin, education, and occupation on food choices. A Pennsylvania study shows these family characteristics:

**Higher education** — serve more dairy products and fruits. Intermediate levels emphasized beef.

**Italian** — leafy green and yellow vegetables.

**Polish** — green and yellow vegetables.

**White-collar** — cheese, ice cream, fruits and fruit juices and more non-leafy, green vegetables than blue-collar families.

**Blue-collar** — more whole milk, meats and poultry than white-collar families.

Students at South Dakota College rated 61 different foods as "willing to eat often," "willing to eat once a week," "unwilling to eat," "never tasted." Of 20 vegetables, only 12 made the "willing to eat often" list of more than half the students.

Asparagus, squash, onions, broccoli, cabbage and tomatoes appeared on the "unwilling to eat" list of 5 to 50 per cent of the students. Parsnips and turnips were liked even less. Corn was the only vegetable

accepted frequently by over 90 per cent of the students. Most liked a wide variety of fruits. Only apricots, cantaloup and rhubarb made the "unwilling to eat" list.

Women were more willing than men to eat fruits often, while men preferred to eat vegetables and meat more frequently. Acceptability for most foods was higher for students from urban homes than from farm homes.

In another study, six thousand Southern urban families listed their most popular desserts as pie, cobbler and short cake with cookies, ice cream, and other milk desserts in that order.

Homemakers were asked whether any family members were making an effort to gain weight, lose weight, or if there were no concern about body weight. More than half indicated no concern. Of those concerned, 18 per cent wanted to lose weight, 13 per cent were trying to maintain weight and only five per cent desired to gain weight. Apparently, concern about body weight did not determine dessert choices.

Instead, appetite appeal appeared to be the most important factor influencing food choices. Financial considerations were seldom mentioned.

Dairy industry surveys have found why people like and don't like milk. Some of the major reasons given were:

## Don't Drink Milk

Don't like milk	53.9%
Doesn't agree with me	9.4
Prefer other beverages	5.2
Milk is too fattening	3.5

## Drink Milk

Nutritional value	43.8%
I like the taste	31.0
Habit, always have it	17.0
It goes well with food	14.8
It is refreshing	13.3
I wanted a cool drink	8.9

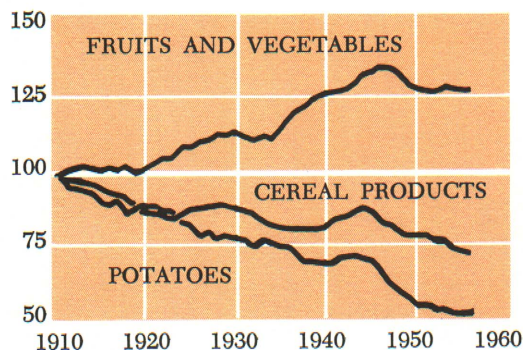
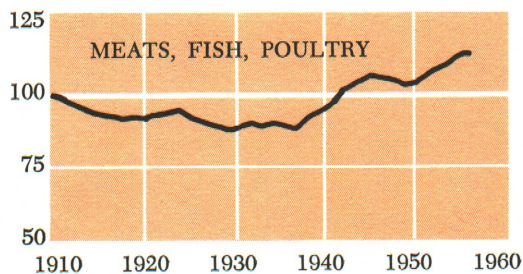
A 1963 U.S. Census survey reports that one-third of the population consumes no milk at home. Twenty-nine per cent of the boys and thirty-nine per cent of the girls in the 15 to 19 age group drink no milk at home.

# Preferences

What changes have you been aware of in your own food habits in the last ten years? Cutting down on calories? Eating fewer cereals? Buying less expensive meats? Using fresh commercial fruit juice rather than frozen concentrate? Buying frozen vegetables instead of fresh? Buying bakery cakes and cookies or do you prepare them from mixes?

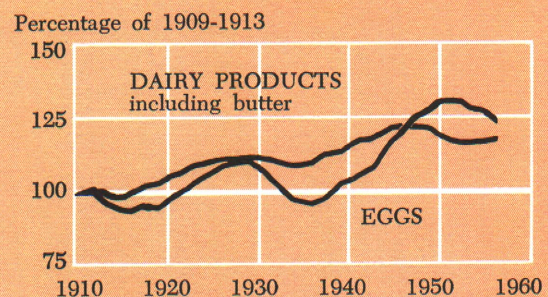
Answers to these questions reflect national trends in changing food habits. The U.S. Department of Agriculture has found that the American diet has been changing constantly over the past 50 years. Eating habits have generally improved with greater variety of foods and less seasonal differences. Enrichment and fortification of staple products has caused a marked rise in essential nutrients, like thiamine, riboflavin, niacin, and iron. Other improvements include food transportation and preservation, effective advertising and health education.

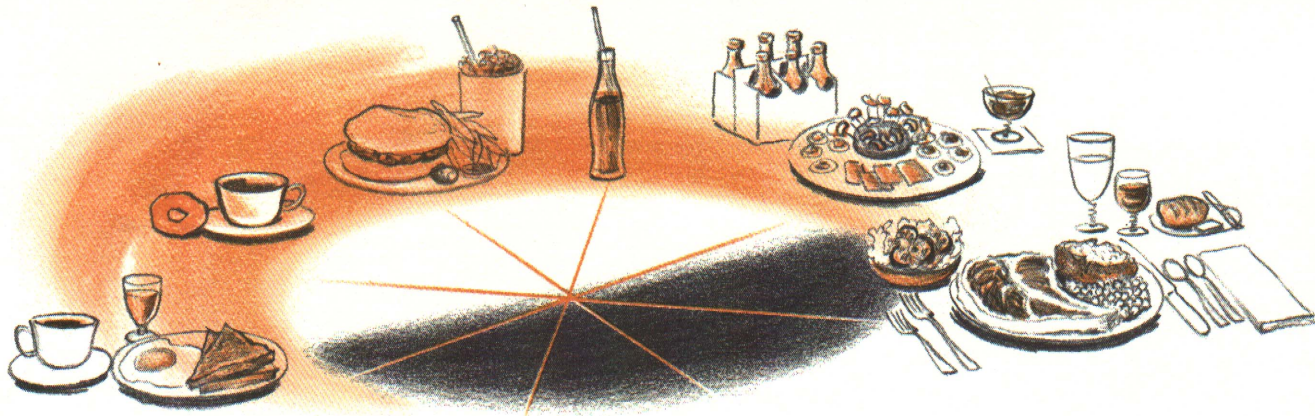
The graphs below show long-range trends in consumption of food during the period from 1909 to 1955.



## EATING TRENDS IN THE UNITED STATES 1909-1955

- Americans consumed 400 fewer calories each day in 1955 than in 1909, reflecting a drop in cereal, bread, and potato consumption.
- There was a marked decrease in starch intake, particularly grain products and potatoes, and an increased intake of more refined carbohydrate foods such as sugars and syrups. Despite the drop in calorie consumption, many Americans gain weight because of a drop in daily physical activities.
- Fat consumption increased in spite of fewer total calories, due partly to the increased use of hydrogenated fats. Preference for foods high in fat and sugar reflects a general rise in the standard of living.
- While the consumption of meat has not changed much over the past half century, poultry consumption has doubled. Consumption of beef has risen, and pork has been generally stable or declining. Higher consumption of animal protein through meat, poultry, fish, and dairy products compensates for vegetable protein lost with decreased grain consumption.
- Consumption of dairy products (excluding butter) increased 40 per cent in 50 years — largely in manufactured products and fluid whole milk. The decline in butter consumption lowers the curve for all dairy products on the chart.
- Fruits and vegetables increased steadily until about 1948. During the 1909 to 1949 period, citrus fruit consumption increased 94 per cent (at the expense of apple consumption) and leafy green and yellow vegetables increased 74 per cent. The latter increase was probably due to improved transportation, processing, and nutrition education. Consumption of fresh fruits and vegetables has decreased since 1948; potato and sweet-potato consumption declined one-half.
- Coffee and tea consumption increased.
- One-fifth more eggs were eaten per capita in 1955 than 1909.





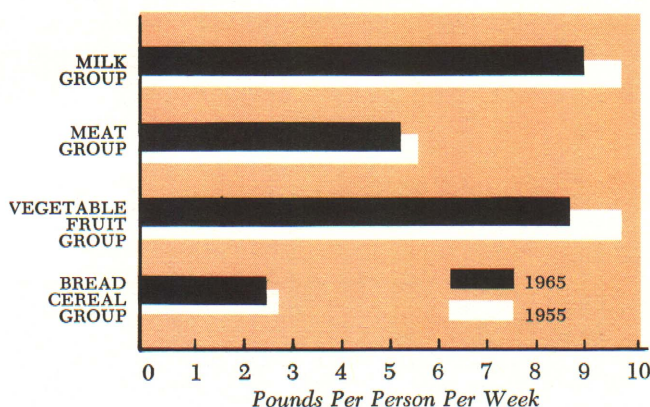
## National Food Trends <sup>1955</sup> <sub>1965</sub>

Do your food habits match these national trends? How would you explain any changes in your family eating habits? Are you eating more poultry? Why? Only because it is less expensive? More beef? Why?

Consumption of beef soared despite price increases which indicates a higher income and food preferences.

The rise in use of frozen desserts seems to reflect the introduction of many low-priced and low-caloried products. Health undoubtedly is also an important factor in these changes — motivating many people to cut calories and selectively choose types of fats. Consumers continued to substitute margarine and oils for butter and shortening and skim milk for whole milk and cream.

The chart below gives the direction of consumption changes from 1955 to 1965 for the four food groups of the Daily Food Guide.



A comparison of 1965 food intake with that of 1955 by United States Department of Agriculture researchers reveals:

- Americans ate one-half pound more meat per person each week than they did ten years earlier. They downed 44 per cent more beef and 65 per cent more poultry, which increased protein and iron intake, but ate less pork, fish and eggs.

- From 1955 to 1965, less milk was used and a shift was made from fresh milk and cream to frozen milk desserts, cheese (up one-third) and processed milk. Evaporated milk use decreased — demand for non-fat dry milk increased. Less butter and shortening and more margarine and oils were used.
- The ten year period also resulted in a shift from fresh vegetables to canned and frozen vegetables. Squeezed, frozen or chilled, citrus fruit juice became more popular than fresh fruit.
- In 1965, shopping lists called for more bakery products (other than bread) with less flour and bread than in 1955. Ready-to-eat cereals have become more popular than cereals which need to be cooked.
- The growing number of young people and the popularity of snacking helps to account for the increase in soft drinks, ades, punches, potato chips, luncheon meats, crackers, cookies, candy and peanut butter.
- To make room for these foods, today's average American has cut down on wheat products (15% less); fresh fruits (40% less); potatoes (15% less); eggs (18% less); veal (49% less); and pork (5% less).

These figures show that 50% of the households in 1965 had "good" diets (meeting standard recommendations for seven major nutrients), compared to 60% in 1955.

Similarly, 20% of the households in 1965 had "poor" diets (less than two-thirds the recommendations for one or more of the seven major nutrients), compared to 15% in 1955.

Reduced use of milk and dairy products, vegetables, and fruits — the major sources of calcium, Vitamin A value, and ascorbic acid — caused most of the decline in good diets.

What will the national food consumption trends show in 1975? What changes will you have made yourself by 1975?



## Origin of Common Foods

- 1 CENTRAL AMERICA**  
 7000 B.C. Red peppers, bottle gourds, avocados, squash, pumpkin  
 5000 B.C. Corn, common beans  
 Before 4000 B.C. Manioc  
 1500 B.C. Sunflowers, lima beans  
 700 A.D. Tomatoes  
 1500 A.D. Turkeys  
 Papaya, pineapple
- 2 WESTERN SOUTH AMERICA**  
 2500 B.C. Sweet potatoes, potatoes
- 3 EASTERN SOUTH AMERICA**  
 1500 B.C. Peanuts  
 Before 100 B.C. Cocoa
- 4 AFRICA**  
 2000 B.C. Watermelons, cow peas, okra, Fluted pumpkin, akee, tamarind
- 5 NORTHERN EUROPE**  
 Before 4000 B.C. Cabbage
- 6 SOUTHEAST EUROPE**  
 Before 2000 B.C. Apples, pears, lemons
- 7 SAUDI ARABIA**  
 Before 2000 B.C. Figs  
 850 A.D. Coffee
- 8 MIDDLE EAST**  
 9000 B.C. Sheep  
 7000 B.C. Barley, peas, lentils, bitter vetch, wheat, goats  
 5000 B.C. Cattle  
 4000 B.C. Grapes, olives, saffron  
 500 B.C. Artichokes
- 9 SOUTHWEST ASIA**  
 2500 B.C. Cabbage, turnips  
 Before 2000 B.C. Melons, beets, lettuce  
 Before 100 B.C. Carrots, oats  
 Almonds
- 10 INDIA**  
 Before 4000 B.C. Dates, bananas, tea, onions, mango  
 Cucumber, eggplant
- 11 CHINA**  
 Before 4000 B.C. Rape  
 Before 4000 B.C. Peach  
 3500 B.C. Rice, millet, sorghum, soybeans, pigs, chickens  
 1500-1000 B.C. Oranges  
 Apricots
- 12 INDONESIA**  
 Before 2000 B.C. Taro  
 Coconut, yam  
 100 B.C. Sugar cane

